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November 6, 2007 4435-01

Mr. Erwin Bucy
Regency Centers
915 Wilshire Boulevard, Suite 220
Los Angeles, CA 90017

Re: Draft Biological Resources Letter Report and Impacts Analysis, State and Hitchcock Center Redevelopment Project, City of Santa Barbara, California

Dear Mr. Bucy,

On November 1, 2007, Dudek biologist Tricia Wotipka conducted a biological resources evaluation of the project site located on approximately 5.4 acres at the southwest corner of State Street and Hitchcock Way in the City of Santa Barbara, California. Approximately 58,325 square feet of existing commercial/retail space will be demolished and four new buildings, totaling 72,209 net square feet of commercial/retail space, 15 residential units, and 303 parking spaces will be constructed as part of the proposed project. An extensive creekside restoration and habitat enhancement program is also proposed along San Roque and Arroyo Burro Creeks to eradicate non-native species in the area and to improve the overall wetland functions and values, including increasing habitat value, in the area.

The intent of this letter report is to: **(1)** describe the existing conditions of biological resources within the Plan area in terms of vegetation, flora, wildlife, and wildlife habitats; **(2)** discuss the relationship of potential impacts (both direct and indirect) to sensitive biological resources resulting from implementation of the project; and **(3)** recommend mitigation measures for impacts to sensitive biological resources to reduce impacts to a level that is less than significant.

1.0 PROJECT SETTING

1.1 Physical Characteristics

The project site is bound by State Street to the north, San Roque Creek and a YMCA facility to the south, Hitchcock Way to the east, and Hope Avenue and Arroyo Burro Creek to the west.

The subject property contains four (4) parcels (Assessor's Parcel Number [APN] 051-040-046, 049, 052 and 053). The project site lies on the U.S. Geological Survey (USGS) 7.5 minute map, Santa Barbara quadrangle, in Section 7; Township 4 North; Range 27 West; latitude 34° 26' 23"N; and longitude 119° 44' 38"W (*Figure 2*). The project site is characterized by relatively level terrain with the exception of San Roque and Arroyo Burro Creeks, two USGS incised blue line streams. Elevations onsite range from 197 to 200 feet above mean sea level (AMSL).

Existing land uses adjacent to the project site consist primarily of commercial land uses to the north (beyond State Street) and to the east (beyond Hitchcock Way) where the properties are zoned C-P/SD-2. A YMCA facility occupies an approximate seven-acre parcel located just south of the project site adjacent to San Roque Creek. Land uses to the west of the project site consist primarily of commercial development (west of Arroyo Burro Creek); however, a mixed-use commercial/residential development is located on the corner of State Street and Hope Avenue directly west and adjacent to the existing Taco Bell parcel (APN 051-040-049).

The project site is currently developed with a complex of one- to three-story office and retail buildings, totaling approximately 58,325 square feet, of commercial square footage, which includes various retail stores, a Circuit City, a 3-story building supporting a Citibank, and a freestanding Taco Bell structure. The site is level and entirely built-out with the exception of the two creeks, San Roque and Arroyo Burro Creek, which border the site to the south and west, respectively. Existing revetment and rock gabion wall structures were noted along some portions of San Roque and Arroyo Burro Creek to provide channel bank stabilization. Stormwater runoff currently leaves the site and discharges into San Roque and Arroyo Burro Creek with no prior treatment.

The existing development currently consists of outdated facilities with few public amenities. The site is entirely developed with impermeable buildings and/or hardscape to the top of slope of San Roque and Arroyo Burro Creek. Creekside areas are paved and "privatized" for use by truck deliveries and employee/tenant parking. There is no defining interior pedestrian circulation pattern within the existing development and minimal dedicated public pedestrian and/or bicycle amenities.

The proposed project would result in the demolition of 58,325 square feet of existing structures onsite and construction of a new mixed-use development intended to provide an updated development for existing and future commercial/retail tenants, while balancing the needs of other various City of Santa Barbara (City) resources including creek resources, public pedestrian and bicycling amenities, housing opportunities, and quality site design and architecture.

1.2 Hydrologic Background

The project site is located within the Arroyo Burro Creek watershed in the City of Santa Barbara, California. The creek flows about seven miles south from its headwaters in the Santa Ynez Mountains, at an elevation of 3,800 feet AMSL, until it discharges into a small tidal estuary at Arroyo Burro Beach County Park (Hendry's Beach). Tributaries to Arroyo Burro Creek include Las Positas Creek, Barger Creek, San Roque Creek, and Lauro Canyon Creek (Questa 2006). Two main tributaries to Arroyo Burro Creek in the upper watershed include San Roque Creek, which forms an east branch, and Arroyo Burro Creek, located in Barger Canyon to the west of the main stem (Questa 2006). Most reaches have moderately vegetated banks, cobble and sand substrate, while portions of Arroyo Burro have been channelized north of Highway 101. Bank instability is a significant problem in middle and lower Arroyo Burro (Questa 2006).

1.3 Project Background/Description

The proposed project involves the redevelopment of approximately 5.4 gross acres of land located on Upper State Street at the corner of State Street and Hitchcock Way (3757 to 3771 State Street). Redevelopment of the project site would provide new updated commercial/retail space for both existing and prospective tenants, including Circuit City and Citibank (existing tenants), various other retail businesses and a new Whole Foods Market. In addition, the proposed redevelopment project includes 15 residential condominium units, two of which are proposed as affordable units. The proposed project includes an extensive creekside restoration and habitat enhancement plan along San Roque and Arroyo Burro Creeks and a number of new public improvements and amenities in the form of public terraces, an approximate 20 foot wide pedestrian parkway along State Street, pedestrian circulation improvements within the development including pathways along the Arroyo Burro and San Roque Creek corridors, and a proposed easement dedication to the City of Santa Barbara for a potential future pedestrian bridge connection over Arroyo Burro Creek to an adjacent property located on Hope Avenue. The project, which is proposed to be LEED certified, will also consist of a number of green building components including solar panels, permeable pavers, comprehensive stormwater retention and treatment, as well as a number of bicycle parking/storage facilities to accommodate and encourage alternative transportation to access the proposed development. A more detailed description of each project component is provided below.

Commercial Development

The proposed development would involve construction of 4 (four) new, one- to three-story buildings on the project site. The largest of the new buildings would include 18,682 sq. ft. to be

occupied by a relocated Circuit City and 38,198 square feet that would be occupied by a Whole Foods Market, and would also include 6,916 square feet of subterranean truck delivery, receiving, storage, and mechanical space to service Circuit City and Whole Foods. In addition, a 2,936 square foot structure would be constructed at the corner of State Street and Hitchcock Way and a 1,204 square foot structure would be constructed along the westernmost property boundary, both of which would be occupied by various commercial and retail tenants. A 4,273 square foot building would be constructed in a location on the western portion of the site fronting State Street and would be occupied by the relocated Citibank. All of the proposed development with the exception of creek restoration and habitat enhancement would occur outside of the creek corridors.

Residential Development

The proposed project would add a total of 15 residential units to the City's housing stock, two of which are proposed as moderate-income affordable units. Nine (9) market rate, three-story townhouse style condominium units are proposed along the San Roque and Arroyo Burro Creek corridors generally behind Whole Foods. Four (4) two-story condo units (three market rate and one affordable) are proposed above the Circuit City building facing State Street with mountain views beyond. Parking for the residential units will be provided on the roof top of Circuit City and Whole Foods primarily as 1-car garages; however, two-car garages are provided for units # 10, 12 and 13. The creekside residential units are proposed with a minimum building setback of 25 feet from the calculated top of bank (SBMC §28.87.250) and a minimum building setback of 50 feet from the 100-year flood elevation line. Finally, two (2) condo units (one market rate and one affordable) are proposed above the retail building located at the corner of State Street and Hitchcock Way. The corner market rate unit is proposed as a two-story unit and the affordable unit is proposed as one-story unit. One covered parking space for each of the two corner units would be provided as assigned spaces in a covered carport on the surface parking lot.

Parking

Parking resources for the proposed development are planned as an interconnected parking lot taking access from two locations on State Street and one location on Hitchcock Way, and as a subterranean employee parking area taking access from Hitchcock way via the truck receiving ramp. The surface parking lot would connect via a ramped driveway to roof-top parking located above Whole Foods Market and Circuit City. Roof-top parking above Whole Foods and Circuit City would be partially shaded with proposed container trees and trellis structures which would be fitted with solar water heating panels serving the Whole Foods Market.

Pedestrian and Bicycle Circulation

The project includes several features that would serve to improve circulation in the project area for various transportation options including new pedestrian/bicycle facilities. Three (3) public plazas and numerous bicycle parking spaces have been provided throughout the site and various walkways are proposed within the development to provide pedestrian connections from street frontages throughout the development to the new commercial and residential uses. The project includes a pedestrian parkway along State Street and permeable public pathways along the two creek corridors traversing the site. In addition, the project includes a proposed easement dedication to the City of Santa Barbara for a potential future pedestrian bridge connection over Arroyo Burro Creek to an adjacent property located on Hope Avenue. The proposed pedestrian bridge connection is shown for planning purposes in the most feasible location onsite in consideration of topography and vegetation constraints on each side of Arroyo Burro Creek based on field observations; however, the exact location and physical criteria of the potential bridge connection will be determined in cooperation with the City and an adjacent landowner willing to participate in completing the connection. Should the City decide to pursue a pedestrian bridge connection in the future and a willing adjacent landowner be identified to complete the connection, the bridge would provide pedestrian access across the project area from Hitchcock Way and State Street to Hope Avenue and La Cumbre Plaza. Finally, efforts to coordinate a pedestrian connection to the property located at 15. S. Hope are in-progress and conceptual plans for the adjacent redevelopment project indicated that a stairway connection located on the adjacent property to the Taco Bell site is potentially feasible and, with project implementation, may serve to provide pedestrian circulation between the two properties.

Grading and Drainage

Grading for the proposed development is estimated at 27,000 cubic yards cut/excavation and 2,100 cubic yards of fill. The majority of the proposed cut grading is associated with excavation for the subterranean employee parking area, truck delivery and receiving area for Whole Foods and Circuit City. Currently, the project site is completely developed with impervious surfaces and hardscape exists in all areas along the top of bank of both San Roque and Arroyo Burro Creeks. Stormwater runoff from the property is currently collected and dispersed to the creek corridors untreated. The proposed project would result in a reduction in the amount of impervious surfaces by approximately 23,300 square feet and stormwater runoff will be reduced given the proposed increase in creeks setbacks, provision of new bioswales, new permeable surface areas and other site design and landscape elements intended to reduce runoff from the property and improve water quality (see additional discussion of water quality below). The

proposed project includes a substantially improved drainage system that will control and convey all stormwater runoff from the property in a non-erosive manner to an appropriate point of dispersal. The proposed drainage system is also designed to retain as much stormwater onsite as possible and to treat 100% of all stormwater runoff prior to discharge.

Creekside Development and Water Quality

The proposed building lay-out has been designed to provide a minimum 25 foot building setback from the calculated top of bank (SBMC §28.87.250) of San Roque and Arroyo Burro Creeks where portions of the existing development currently encroach approximately 26 feet beyond the 25 foot building setback from the calculated top of bank defined per SBMC §28.87.250. In addition to providing an overall increased building setback along both creek corridors according to the calculated top of bank defined per SBMC §28.87.250, the proposed building lay-out would result in increasing the minimum building setback from the 100-year flood elevation for both creeks on the site from approximately 23 feet to a minimum of 50 feet. Minor non-habitable development encroachment into the setback areas along Arroyo Burro Creek would consist of permeable materials associated with a public pedestrian path and the required fire access lane, and columns to support the vehicle ramp providing access to the roof-top parking above Whole Foods and Circuit City. Minor non-habitable development encroachment into the setback areas along the San Roque Creek corridor would consist of permeable materials associated with a public pedestrian pathway and a County Flood Control District creek maintenance access lane, and a portion the truck receiving ramp directly adjacent to Hitchcock Way which provides access to the subterranean garage. The Flood Control creek maintenance lane is being provided at the request of the District to maintain easily accessibly areas adjacent to the creeks within an existing Flood Control easement.

As discussed above, the proposed project would result in a reduction in the amount of impervious surfaces by approximately 23,300 square feet and associated stormwater runoff onsite would be further reduced given the proposed increase in creeks setbacks, provision of new bioswales, new permeable surface areas and other site design and landscape elements intended to reduce runoff from the property and improve water quality. Permeable surface area is proposed for all pedestrian path, fire department and Flood Control District access lane areas along the creek corridors which will assist in natural infiltration and treatment of runoff from this portion of the site. Additional permeable areas and bioswales are incorporated throughout the project design as landscape elements. The project design includes an innovative element that will serve to siphon runoff from roof surfaces away from the creek corridors to the northerly portion of the property where bioswales will be developed to retain and treat stormwater runoff.

Existing conditions onsite provide for no retention or treatment of stormwater. The proposed development and drainage system is designed to retain as much stormwater onsite as possible and to treat 100% of all stormwater runoff prior to discharge. The project incorporates various Best Management Practices (BMPs) into the development in addition to the permeable surfaces and bioswales discussed above including drop-inlet filters and a Vortechs stormwater treatment system for the treatment of stormwater runoff. The Vortechs system is a subsurface hydrodynamic separator that removes sediment, particles, free oil and grease and is custom-designed for site-specific conditions. Stormwater runoff from impervious surfaces not accommodated by natural infiltration is proposed to be collected and conveyed to the Vortechs stormwater treatment system and treated for an additional 80% pollutant load reduction prior to discharge via a single outlet installed on an existing culvert at Arroyo Burro Creek.

A geomorphological study prepared by Questa Engineering Corporation on March 9, 2006 illustrated that while San Roque Creek is stable; the banks of Arroyo Burro Creek are progressively eroding and degrading. The study estimates that, based on the size of the bed material (sand) along the 500-foot project reach, and the current slope between the Hope Street culvert and State Street, the channel will continue to degrade between six inches to 3.5 feet over the long term if the bed load composition remains the same sandy material (Tierney 2006). The largest amount of degradation is likely to be seen immediately below the State Street culvert outlet (Tierney 2006; Questa 2006).

To address this issue, a comprehensive creek restoration and habitat enhancement plan is proposed which would include the restoration and stabilization of Arroyo Burro Creek along with the restoration of both the Arroyo Burro and San Roque channel banks and setback areas along both creek corridors. The proposed restoration plan includes a long-term solution to the slowly progressing bank degradation noted on Arroyo Burro Creek, which entails placing fill into the existing channel and recreating a more stable, steeper, two percent gradient for approximately 450 feet, starting from the State Street outlet culvert. A series of eight, one-foot high boulder grade controls would be placed about 50 feet apart in this stretch. A total of 800 to 900 cubic yards of material and 800 tons of rock (one and two ton with other sizes ranching from ¾ to 16 inches) would be placed in the creek bed to increase channel width, reducing flow depth and reducing channel scour forces (Questa 2006; Tierney 2006). The wider channel width will then serve to accommodate bank toe planting and biotechnical stabilization techniques and reestablishing a higher gradient creek will reduce the creek's tendency to move laterally, thus ensuring greater bank toe stability. The proposed creek restoration and habitat enhancement plan also includes enhancement and extension of vegetated buffer areas along both creek corridors, which consists of the removal of non-native species and the introduction of native plants along

the creek slopes. The restored creek areas and enhanced riparian habitat would provide new and restored naturally vegetated areas along both creek corridors which will serve as natural filters of stormwater runoff and introduce higher functions and values to an extensively urbanized setting.

2.0 METHODS AND SURVEY LIMITATIONS

Data regarding biological resources present in the project area were obtained through a review of pertinent literature and through field reconnaissance; both are described in detail below.

2.1 Literature Review

Sensitive biological resources present or potentially present onsite were identified through a literature search using the following sources: U.S. Fish and Wildlife Service (USFWS) (1999, 2006), California Department of Fish and Game (CDFG) (2006b-e), and California Native Plant Society's (CNPS) Online Inventory of Rare and Endangered Plants of California (CNPS website, June 2007). The California Natural Diversity Database (CNDDB) (CDFG 2006a) was also reviewed to identify sensitive species possibly occurring within the project limits. General information regarding wildlife species present in the region was obtained from Stebbins (2003) for reptiles and amphibians, American Ornithologists' Union (2003) for birds, Jones et al. (1997) for mammals, and Emmel and Emmel (1973) for butterflies. For the purposes of this report, the CDFG (2003) vegetation classification system was used to map and describe vegetation communities, although in this report, reference to vegetation communities and their corresponding associations are based on Sawyer and Keeler-Wolf (1995). Plant species nomenclature follows Hickman (1993).

Additionally, the following project-specific literature was reviewed to support the preparation of this letter report: *Biological Assessment for the State and Hitchcock Center Redevelopment Project* (Tierney 2005); *Preliminary Creekside Restoration Monitoring and Maintenance Plan for the State and Hitchcock Redevelopment Project* (Tierney 2006); and the *Creek Stability Analysis for the Hitchcock Center Redevelopment Project* (Questa 2006).

2.2 Resource Mapping

Vegetation Mapping

The site was initially evaluated for biological resources by Rachel Tierney on September 10, and December 2, 2004, and January 14, February 2, and May 5, 2005.

On November 1, 2007, Dudek biologist Tricia Wotipka conducted a follow-up visit to update the previous biological assessment including the preparation of a vegetation map and a general botanical and zoological survey.

Vegetation community classifications used in this report where applicable follow the *Vegetation Classification and Mapping Program, List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database* (CDFG 2003). Some vegetation communities observed in the field did not correspond well with the vegetation communities described in the CDFG system. In these instances, Dudek described vegetation communities that are identified as "modified" in the vegetation descriptions below in order to more accurately characterize the vegetation types observed onsite.

The potential for sensitive plants and wildlife to occur within the project site was assessed based on vegetation communities, soils, and habitat quality in the project site and the distribution and range of sensitive species known to occur in the region. A formal delineation for land under the jurisdiction of the CDFG, pursuant to the California Fish and Game Code; the U.S. Army Corps of Engineers (ACOE) pursuant to Section 404 of the federal Clean Water Act; and the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the federal Clean Water Act was not conducted. However, wetlands habitat was anecdotally noted during the mapping effort by visually assessing and mapping the drip line of hydrophytic vegetation and noting the ordinary high water mark.

General Flora

All plant species encountered during the site visit were identified and recorded by Tricia Wotipka on November 1, 2007. Latin and common names of plants follow *The Jepson Manual* (Hickman 1993). A detailed list of plant species observed within the 5.42-acre project site is presented in *Appendix A*.

General Fauna

General zoological resources were identified within the project site by Tricia Wotipka during the November 2007 survey. All wildlife species detected during the field surveys by sight, vocalizations, burrows, tracks, scat, and other signs were recorded. Binoculars (7X35) were used to aid in the identification of observed wildlife. Latin and common names of animals follow Stebbins (2003) for reptiles and amphibians, American Ornithologists' Union (2003) for birds,

Jones et al. (1997) for mammals, and Emmel and Emmel (1973) for butterflies. A cumulative list of wildlife species observed within the project site during the survey is presented in *Appendix B.*

Special-Status and/or Regulated Resources

Special-status species are those species that have been given special recognition by federal, state, or local conservation agencies and organizations due to limited, declining, or threatened population sizes. This includes those species listed by the state and federal government as threatened or endangered, those species proposed for state and/or federal listing or candidates, and those plant species found on Lists 1A, 1B or 2 of the CNPS Inventory of Rare and Endangered Plants of California (2001; Inventory) or CNPS online inventory (http://cnps.web.aplus. net/cgi-bin/inv/inventory.cgi).

Sources used for determining special-status biological resources are as follows:

- Wildlife: USFWS 1999, 2006 and CDFG California Natural Diversity Database (CNDDB) (CDFG 2006a,b,d);
- Plants: CDFG CNDDB (CDFG 2006a, c, d) and CNPS (2007) (including any revisions provided on http://www.cnps.org/inventory, accessed June 2007); and habitats, CDFG (2003).

During the biological resources survey, the entire project site was slowly and methodically surveyed to effectively inventory all biological resources present within the project site. Habitat assessments for sensitive plant and wildlife species were also conducted during the vegetation mapping along with anecdotal observations of wetlands habitat. A formal wetlands delineation was not conducted.

Survey Limitations

Limitations of the survey include seasonal constraints, a diurnal bias, and the absence of focused trapping for small mammals and reptiles. Due to the extent of development onsite, sensitive plant species and most sensitive wildlife species are not expected to occur. Climatic conditions during the survey generally were favorable for the identification of wildlife. Surveys were conducted during the daytime to maximize visibility for the detection of plants and most animals. Birds represent the largest component of the vertebrate fauna, and because they are active in the

daytime, diurnal surveys maximize the number of observations of this portion of the fauna. In contrast, daytime surveys usually result in few observations of mammals, many of which may only be active at night. In addition, many species of reptiles and amphibians are secretive in their habits and are difficult to observe using standard meandering transects. Pitfall trapping is the most effective technique for detecting many of these species; however, such trapping was beyond the scope of this project.

3.0 RESULTS

3.1 Vegetation Communities/Land Covers

Five vegetation communities/land covers were identified within the 5.42-acre project site during the 2007 field survey including: developed land (4.56 acres); eucalyptus (0.22 acre); ornamental landscaping (0.15 acre);; southern willow scrub (0.20 acre); and disturbed wetland (0.29 acre). Please note these acreages include both onsite and offsite areas needed to complete the project. These vegetation communities/land covers are described below, their acreages are presented in *Table 1*, and their spatial distributions are presented in *Figure 4*.

Table 1.
Vegetation Communities and Land Covers
State and Hitchcock Redevelopment Project

Vegetation Community/Land Cover Type	Mapping Label	Existing Acres
Riparian Forest and Woodland		
Southern Willow Scrub	SWS	0.20
Riparian and Waters/Wetlands		
Disturbed Wetland	DW	0.29
Non-Native Land Cover		
Developed Land	DEV	4.56
Eucalyptus	EUC	0.22
Ornamental Landscaping	ORN	0.15
TOTAL		5.42

Southern willow scrub is often described by Holland (1986) as a dense, broad-leaved, winter-deciduous riparian thicket dominated by several species of willow (*Salix* ssp.), with scattered emergent Fremont's cottonwood (*Populus fremontii*) and western sycamore (*Platanus*

racemosa). Due to the density of the shrub canopy, the understory is fairly depauperate. This community is typically found on loose, sandy, or fine, gravelly alluvial soils near stream channels and is dependent on repeated flooding (Holland 1986). Within the project site, southern willow scrub is located near the confluence of San Roque and Arroyo Burro Creek and is dominated by arroyo willow (*Salix lasiolepis*) with a limited understory comprised of cocklebur (*Xanthium strumarium*), bristly ox-tongue (*Picris echioides*), stinging nettle (*Urtica dioica*), and Douglas' nightshade (*Solanum douglasii*). Southern willow scrub is considered a wetlands community and as such may be under the jurisdiction of the CDFG, pursuant to Section 1602 of the California Fish and Game Code; the ACOE, pursuant to Section 404 of the Clean Water Act; and the RWQCB pursuant to Section 401 of the federal Clean Water Act and the Porter-Cologne Act.

Disturbed wetland typically refers to drainage dominated by a mixed assemblage trees, shrubs, sub-shrubs, and hydrophytic herbs with roughly equal cover of native versus non-native species. Within Arroyo Burro Creek, this community is dominated by coast live oak (*Quercus agrifolia*), shamel ash (*Fraxinus uhdei*), California fan palm (*Washingtonia filifera*), Canary Island fan palm (*Phoenix canaeriensis*), and western sycamore in the canopy with a mix of castor bean (*Ricinus communis*), giant cane (*Arundo donax*), German ivy (*Senecio mikanoides*), English ivy (*Hedera helix*), garden nasturtium (*Tropaeolum majus*), periwinkle (*Vinca major*), poison oak (*Toxicodendron diversilobum*), California blackberry (*Rubus ursinus*), and horsetail (*Equisetum arvense*) in the understory. Within San Roque Creek, this community is dominated by a variety of eucalyptus (*Eucalyptus* ssp.) in the canopy with a fairly limited understory comprised of periwinkle, scattered arroyo willows, and riprap. Disturbed wetland is considered a wetlands community and as such may be under the jurisdiction of the CDFG, pursuant to Section 1602 of the California Fish and Game Code; the ACOE, pursuant to Section 404 of the Clean Water Act; and the RWQCB pursuant to Section 401 of the federal Clean Water Act and the Porter-Cologne Act.

Developed land refers to those areas onsite supporting manmade structures including existing residential, commercial, and retail development, parking facilities, and other attendant features. This is not considered a sensitive land cover.

Eucalyptus typically consists of monotypic stands of introduced Australian eucalyptus trees (*Eucalyptus* spp.). The understory is often either depauperate or lacking owing to shade and the possible allelopathic (toxic) properties of the eucalyptus leaf litter. Within the project site, eucalyptus refers to the portion of San Roque Creek that bisects the southern portion of the property. Although areas supporting eucalyptus trees are of limited value to most native plants

and animals, they frequently provide nesting and perching sites for some raptors and therefore can be considered sensitive as a resource for those specific species.

Ornamental landscaping typically refers to areas where ornamental plant species and landscaping have been installed in place of native plantings, primarily for esthetic purposes. Within the project site, ornamental landscaping occurs along the upper west slopes of Arroyo Burro Creek and support a myriad of species likely associated with the commercial/retail development to the west. This is not considered a sensitive land cover.

3.1.1 Floral Diversity

Forty-four vascular plant species, including 22 native species (50 percent) and 22 non-native species (50 percent), were recorded onsite. However, please note that this list is not entirely comprehensive as it does not include a number of ornamental species that occur along the upper west bank of Arroyo Burro Creek, which likely colonized the site from adjacent commercial and residential properties.

3.1.2 Zoology - Wildlife Diversity

Reptiles and Amphibians

Only one reptile species, the western fence lizard (*Sceloporus occidentalis*), was observed onsite during the November 2007 survey. Reptiles that may potentially occur onsite include the black-bellied slender salamander (*Batrachoseps nigriventris*), western toad (*Bufo boreas*), and Pacific tree frog (*Hyla regilla*).

Birds

A total of seven bird species were detected onsite during the 2007 survey including: Anna's hummingbird (*Calypte anna*); black phoebe (*Sayornis nigricans*); acorn woodpecker (*Melanerpes formicivorus*); northern mockingbird (*Mimus polyglottos*); American crow (*Corvus brachyrhynchos*); Bewick's wren (*Thryomanes bewickii*); and song sparrow (*Melospiza melodia*). The following bird species have a potential to occur onsite based on suitable habitat present, appropriate geographic range, and based on previous observations by Rachel Tierney: common raven (*Corvus corax*); mourning dove (*Zenaida macroura*); downy woodpecker (*Picoides pubescens*); Nuttall's woodpecker (*Picoides nuttallii*); Pacific-slope flycatcher

(*Empidonax difficilis*); California thrasher (*Toxostoma redivivum*); western scrub jay (*Aphelocoma californica*); European starling (*Sturnus vulgaris*); brown towhee (*Pipilo fuscus*); lesser goldfinch (*Carduelis psaltria*); purple finch (*Carpodacus purpureus*); American robin (*Turdus migratorius*); oak titmouse (*Baeolophus inornatus*); California towhee (*Pipilo crissalis*); spotted towhee (*Pipilo maculates*); yellow-rumped warbler (*Dendroica coronata*); wrentit (*Chamaea fasciata*); golden-crowned sparrow (*Zonotrichia atricapilla*); white-crowned sparrow (*Zonotrichia leucophrys*); and cliff swallow (*Petrochelidon pyrrhonota*).

Because the site supports a variety of tall, mature trees forming a dense canopy with scattered open areas, the project site may provide foraging and roosting along with limited nesting opportunities for a number of raptors including the red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), Cooper's hawk (*Accipiter cooperii*) (roosting only), great horned owl (*Bubo virginianus*), barn owl (*Tyto alba*), and western screech owl (*Megascops kennicottii*) (Tierney 2005).

Mammals

No mammals were observed onsite during the 2004, 2005, and 2007 surveys and because the site is located in a highly urbanized region of Santa Barbara, the site is not expected to support a diverse assemblage of mammals. Mammals that may occur onsite include Virginia opossum (*Didelphis virginiana*), broad-footed mole (*Scapanus latimanus*), Botta's pocket gopher (*Thomomys bottae*), Merriam's chipmunk (*Tamias merriami*), western gray squirrel (*Sciurus griseus*), raccoon (*Procyon lotor*), deer mouse (*Peromyscus maniculatus*), brush mouse (*Peromyscys boylii*), California mouse (*Peromyscus californicus*), black rat (*Rattus rattus*), gray fox (*Urocyon cinereoargenteus*), and striped skunk (*Mephitis mephitis*) (Tierney 2005).

Invertebrates

Three invertebrate species were identified onsite including the monarch butterfly (*Danaus plexippus*), red admiral (*Vanessa atalanta*), and cabbage butterfly (*Pieris rapae rapae*). Other invertebrate species that may occur onsite include, but are not limited to, pale swallowtail (*Papilio eurymedon*), tiger swallowtail (*Papilio rutulus*), anise swallowtail (*Papilo zelicaon lucas*), Pacific sara orangetip (*Anthocharis sara sara*), checkered white (*Pontia protodice*), Behr's metalmark (*Apodemia mormo virgulti*), west coast lady (*Vanessa annabella*), and painted lady (*Vanessa cardui*).

3.2 Special-Status Resources

The following resources are discussed in this section: **(1)** plant and animal species present in the project vicinity that are given special recognition by federal, state, or local conservation agencies and organizations owing to declining, limited, or threatened populations, that are the result, in most cases, of habitat reduction; and **(2)** habitat areas that are unique, are of relatively limited distribution, or are of particular value to wildlife. Sources used for the determination of sensitive biological resources are as follows: wildlife, USFWS 2006; CDFG 2006a-e; plants and CNPS 2007; and habitats, CDFG 2003.

3.2.1 Special-Status Plants

No special-status plant species (CNPS List 1, 2, or 3) or state- and federally-listed endangered or threatened plant species were observed during any of the site visits and due to the primarily developed and disturbed nature of the site, special-status plants are not expected to occur.

Three sensitive plant species are known to occur in the project vicinity: Plummer's baccharis (*Baccharis plummerae* ssp. plummerae), CNPS List 4.3; Santa Barbara honeysuckle (*Lonicera spicata ssp. spicata*), CNPS List 1B.2; and bitter gooseberry (*Ribes amarum var. hoffmanii*), CNPS List 3.

Plummer's baccharis is a deciduous shrub known to occur in shaded canyons, broadleafed upland forests, chaparral, cismontane woodland, and coastal scrub between five and 425 meters. This species typically blooms between May and October.

Santa Barbara honeysuckle is abundant within the entire San Roque Canyon above Foothill Road (Tierney 2005). This perennial, vine-like shrub is very common along the periphery of the City of Santa Barbara in many habitats (riparian, woodland, scrub). Although it is very often encountered along the coastal slopes of Santa Barbara, Goleta and Carpinteria, this species' only other known locale is on Catalina and Santa Cruz Islands (Tierney 2005).

Bitter gooseberry, a deciduous shrub, is known to occur in chaparral and riparian woodland habitats between 150 and 1190 meters (CNPS 2007). This species is an endemic, is commonly scattered on cool, shaded canyons and creek banks and is known from coastal creeks within Santa Barbara County. This armed *Ribes* can be identified by the large, globose fruits with unequal thorns (Tierney 2005).

These species are characterized as perennial shrubs and subshrubs and as such would have been detected onsite if present.

3.2.2 Special-Status Wildlife

One sensitive invertebrate, the monarch butterfly, was identified foraging high in the canopy of several eucalyptus trees along the northern bank of San Roque Creek. The monarch butterfly, while not known to aggregate in large numbers onsite, may forage occasionally in the project site.

No sensitive songbirds were detected onsite during previous and current biological surveys. However, the following species have a moderate potential to forage onsite due to the presence of suitable habitat: Cooper's hawk (*Accipiter cooperii*); red-tailed hawk (*Buteo jamaicensis*); red-shouldered hawk (*Buteo lineatus*); and sharp-shinned hawk (*Accipiter striatus*).

Table 2 lists sensitive wildlife species that have a potential to occur onsite based on the project location and general vegetation communities/land covers found in the area. For each species listed, a determination is made regarding the potential for the species to occur within the project site. Where pertinent, a distinction is made between foraging and breeding habitat available onsite.

Table 2.
Special-Status Wildlife Species Potentially Occurring Onsite
State and Hitchcock Redevelopment Project

COMMON NAME/SCIENTIFIC NAME	STATUS FEDERAL/ STATE	PRIMARY HABITAT ASSOCIATIONS	STATUS ONSITE OR POTENTIAL TO OCCUR
California red-legged frog *Rana aurora draytoni*	FT/ CSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands	Low potential to occur onsite. Has not been observed in Arroyo Burro Creek following focused surveys conducted for this species within downstream reaches in early 2000 and 2001 (Tierney, 2000; Tierney 2005). Has been documented in the upper drainages of several creeks that drain into Goleta and Montecito (Collins, 2004; Tierney 2005). There is no known record of this species in the lower (City stretch) portion of either San Roque or Arroyo Burro Creek (Tierney 2005).

Southwestern pond turtle *Emys* [=*Clemmys*] *marmorata pallida*	BLM/ CSC	Slow-moving permanent or intermittent streams, ponds, small lakes, reservoirs with emergent basking sites; adjacent uplands used during winter	Not detected onsite during previous and current surveys. Low to moderate potential to occur onsite. Has not been observed in Arroyo Burro Creek, although it may occur in the lower reaches and lagoon portions of the watershed due to the presence of suitable habitat, and its wide historical distribution in most permanent watercourses along the south coast of Santa Barbara County (Tierney 2005). This turtle has been collected from pools within the City of Santa Barbara and is found within highly degraded sites along lower city drainages (Collins, 2004; Tierney 2005;personal observations by Tierney).
Two-striped garter snake *Thamnophis hammondii*	None/ CSC	Marshes, meadows, sloughs, ponds, slow-moving water courses, open-canopy riparian woodland and freshwater marsh with suitable bankside basking sites.	Moderate potential to occur onsite. Although not known from Arroyo Burro Creek, it may be present on the basis of suitable habitat, lack of adequate surveys, and its known occurrence in the Mission Creek and San Jose Creek watersheds (Tierney, 2000; Tierney 2005).
Silvery legless lizard *Anniella pulchra pulchra*	CSC	Loose soils (sand, loam, humus) in coastal dune, coastal sage scrub, woodlands, and riparian habitats	Low to moderate potential to occur onsite. Most of the records for this area are concentrated in San Andreas fine sandy loam and Tierra sandy loam soils (Shipman et al, 1981; Tierney 2005), which occur along the eastern and southern portions of Hope Ranch, and the northern and southern portions of Las Positas Friendship Park and Rancho Las Positas (Jesuit Property), respectively (Tierney 2005). If present in the project area, this species may be expected to occur in the Arroyo Burro Creek floodplain and along the lower slopes of adjacent hills (Tierney 2005).

Cooper's hawk *Accipiter cooperii* (nesting)	None/ CSC	Riparian and oak woodlands, montane canyons	Low potential to nest/breed onsite; moderate potential to forage and roost in eucalyptus trees onsite.
Sharp-shinned hawk *Accipiter striatus* (nesting)	BCC/ CSC/ Covered	Nests in coniferous forests, ponderosa pine, black oak, riparian deciduous, mixed conifer, Jeffrey pine; winters in lowland woodlands and other habitats	Low potential to nest/breed; moderate potential to roost and forage in eucalyptus trees onsite. Locally, it is considered an uncommon to fairly common transient and winter visitor, where it is typically associated with riparian and oak woodland habitats (Lehman, 1994; Tierney 2005). This species has not been observed in the project site, but may be expected to forage and roost in the riparian corridor of Arroyo Burro Creek to the south of Highway 101 to north of Foothill Road.
Yellow warbler *Dendroica petechia brewsteri* (nesting)	None/ CSC	Nests in lowland and foothill riparian woodlands dominated by cottonwoods, alders and willows; winters in a variety of habitats	Low potential to nest onsite due to the lack of suitable willow thickets.
Blue grosbeak *Guiraca caerulea*	None/None		Low potential to nest onsite due to the lack of suitable habitat. Locally it is considered a rare, localized summer resident (breeder) and fall transient along the south coast of Santa Barbara County (Lehman, 1994). Nesting records exist for Atascadero Creek, approximately 5 air miles west of the project area. This species typically nests along the outer edge of the riparian corridor, adjacent to weedy fields and grasslands or scrub habitat. (Tierney 2005).
White-tailed kite *Elanus leucurus* (nesting)	None/ P	Open grasslands, savanna-like habitats, agriculture, wetlands, oak woodlands, riparian	Low potential to nest and forage onsite. White-tailed kites are considered to be an uncommon resident and local summer breeder along coastal southern Santa Barbara County.
Northern harrier *Circus cyaneus* (nesting)	None/ CSC	Open wetlands (nesting), pasture, old fields, dry uplands, grasslands, rangelands, coastal sage scrub	Low potential to nest and forage onsite. Uncommon fall transient and winter visitor to the south coast of Santa Barbara County.

Yellow-breasted chat *Icteria virens* (nesting)	None/ CSC	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles and dense brush.	No potential to nest onsite due to the lack of suitable habitat; low to moderate potential to serve as a transient foraging species. Due to habitat loss, this species is considered a rare transient and rare summer resident along the south coast of Santa Barbara County (Lehman, 1994). It may be expected to be a transient foraging species in the Arroyo Burro Creek riparian corridor of the project area (Tierney 2005).
Pallid bat *Antrozous pallidus*	None/ CSC	Rocky outcrops, cliffs, and crevices with access to open habitats for foraging	Moderate potential to forage onsite. This species has been found regularly along the south coast of Santa Barbara and Ventura counties (e.g., Vandenberg Air Force Base) (Collins, 1998) and the lower Ventura River floodplain (Hunt and Lehman, 1992; Tierney 2005). Based on its wide foraging habits, its regional distribution, and the presence of suitable foraging habitat, pallid bats may be expected to occasionally forage over the Arroyo Burro Creek floodplain south of Highway 101 onsite and in both creeks north of Foothill Road and possibly occasionally visit the project site.
Pale big-eared bat *Corynorhinus townsendii pallescens*	FSC/CSC		Low to moderate potential to occur onsite. The only record for the south coast of Santa Barbara County comes from Santa Barbara, although it undoubtedly occurs here more commonly than this record would indicate (L.Hunt; Per. Com.; Tierney 2005). Big-eared bats may be expected to occasionally forage over woodlands in the Arroyo Burro Creek floodplain in the project area, and temporarily roost in the numerous trees, scattered throughout the project area (Tierney 2005).

Monarch butterfly *Danaus plexippus* (wintering sites)	None/ None	Overwinters in eucalyptus groves	One individual was observed during the 2007 survey in flight over San Roque Creek flying through a thicket of eucalyptus trees.
Tidewater goby *Eucyclogobius newberryi*	FE/ CSC	Low-salinity waters, such as terminal lagoons formed by sandbars that experience constant surface or sub-surface freshwater inflows.	Low potential to occur onsite. This species is known from the lagoon at the mouth of Arroyo Burro Creek (Ambrose et al, 1993; Tierney 2005), less than 2.5 miles south of the project site. Culverts and structures located downstream at Hwy. 101 may be potential major barriers (SB Co. Flood Control Dist. 1999; Johnson 1999; Tierney 2005).
Southern steelhead *Oncorhynchus mykiss irideus*	FE/ CSC	Spawn in cool, clear, well-oxygenated streams with suitable depth, current velocity, and gravel size	Low potential to occur onsite due to the presence of barriers downstream which likely preclude movement through the site.

Federal Designations:
FE: Federally-listed Endangered
FT: Federally-listed as Threatened
FSC: Federal Special Concern Species

State Designations:
CSC: California Special Concern Species
P: California Department of Fish and Game Protected and Fully Protected Species
ST: State-Listed as Threatened

4.0 Biological Impacts

4.1 Vegetation Communities/Land Covers

Direct Impacts

While a majority of the project impacts will occur to existing developed landscape resulting from project redevelopment, approximately 0.18 acre of impact will occur to jurisdictional waters of the U.S., including wetlands, resulting from installation of the proposed grade structures and channel stabilization.

Thus, implementation of the proposed project will result in direct impacts to the following vegetation communities/land covers both onsite and offsite: 0.02 acre southern willow scrub; 0.16 acre of disturbed wetland; and 0.03 acre of developed land (*Table 3*)(*Figure 4*). Impacts to

southern willow scrub and disturbed wetland are significant but mitigable to a level that is less than significant. Compensatory mitigation will be provided for direct impacts to these sensitive vegetation communities. In addition, a restoration plan was prepared for the proposed project by Rachel Tierney in March 2006. A landscape plan showing the proposed creekside restoration was designed to illustrate the proposed wetlands enhancement/restoration program which incorporates weed/exotics eradication and replanting with native species (*Figure 5*). Please refer to *Section 5.0* for a list of the recommended mitigation ratios.

Table 3.
Proposed Direct Impacts to Vegetation Communities/Land Covers

Vegetation Communities/Land Covers	Direct Impacts (in acres)
Jurisdictional Wetlands/Waters of the U.S.	
Southern Willow Scrub	0.02
Disturbed Wetland	0.16
Subtotal	*0.18*
Non-Native Land Covers	
Developed Land	0.03
Eucalyptus	0
Ornamental Landscaping	0
Subtotal	*0.03*
TOTAL	0.21

**Please note that these impacts refer only to the creek stabilization component of the project as that component impacted sensitive vegetation communities. The actual redevelopment portion of the project results in impacts to developed land only and thus was not included in the impact calculation above.*

Indirect Impacts

Indirect impacts to sensitive wetland vegetation communities could result primarily from adverse "edge effects", which occur along the development-preservation interface. During construction activities, edge effects may include dust which could disrupt plant vitality in the short-term or construction-related soil erosion and water runoff. In the absence of BMPs, construction-related minimization measures to control dust, erosion, and runoff, and compliance with NPDES requirements, indirect impacts on jurisdictional waters of the U.S./State could occur. Potential long-term indirect impacts on vegetation could include trampling by humans, invasion by exotic plants and animals, lighting, noise, exposure to urban pollutants (*e.g.*, fertilizers, pesticides, herbicides, and other hazardous materials), soil erosion, and hydrological changes (*e.g.*, surface and groundwater level and quality).

With respect to short-term construction related impacts, it is assumed that standard construction BMPs will be employed as a project condition to protect water quality and resources during construction. Thus, this would not be considered a significant impact.

With respect to long-term indirect impacts, wildlife species using the adjacent trees and shrubs in San Roque and Arroyo Burro Creeks for foraging, perching, or nesting purposes may be indirectly affected in the short-term by noise and in the long-term by noise and lighting, which can disrupt species vitality. However, as described in *Section 5.0*, typical construction practices including dust and erosion control, lighting, noise, and water quality BMPs will be implemented which will reduce these effects to less than significant. In addition, currently existing conditions onsite provide for no water retention or stormwater treatment. However, the proposed development and drainage system is designed to retain as much stormwater onsite as possible and to treat 100% of all stormwater runoff prior to discharge. The project incorporates various BMPs into the development in addition to permeable surfaces and bioswales including drop-inlet filters and a Vortechs stormwater treatment system for the treatment of stormwater runoff. The Vortechs system a subsurface hydrodynamic separator that removes sediment, particles, free oil and grease and is custom-designed for site-specific conditions. Stormwater runoff from impervious surfaces not accommodated by natural infiltration is proposed to be collected and conveyed to the Vortechs stormwater treatment system and treated for an additional 80% pollutant load reduction prior to discharge via a single outlet installed on an existing culvert at Arroyo Burro Creek.

In addition, a comprehensive creek restoration and habitat enhancement plan is proposed which will include restoration and stabilization of the Arroyo Burro Creek channel, and restoration of creek banks and setback areas along both creek corridors. The proposed restoration plan includes a long-term solution to the slowly progressing bank degradation noted on Arroyo Burro Creek, which entails placing fill with a series of grade structures to minimize soil erosion.

Thus, with the project measures described above no indirect impacts to vegetation communities/land covers are expected to occur.

4.2 Special-Status Plants

Direct Impacts

No special-status plant species were detected onsite during the 2004, 2005, and 2007 surveys and due to the extent of disturbance onsite within San Roque and Arroyo Burro Creek special-status plants are not expected to occur. Therefore, direct impacts are not anticipated.

Indirect Impacts

Most of the indirect impacts to vegetation communities cited above can also affect sensitive plant species. However, through the implementation of standard construction BMPs and construction-related minimization measures to control dust, erosion, and runoff, potential adverse effects will be avoided. Therefore, indirect impacts to offsite special-status plants are not expected to occur.

4.3 Special-Status Wildlife

Direct Impacts

One special-status invertebrate, the monarch butterfly, was detected onsite in flight over San Roque Creek. The mature trees that form the riparian corridors onsite may provide temporary autumnal roost sites for the monarch butterfly. Therefore, the monarch butterfly may be impacted by proposed tree removal. However, this is a significant but mitigable impact. Please refer to *Section 5.0* for a list of recommended mitigation measures.

Raptor species, while not detected during the 2007 survey effort, most likely occur onsite and use a variety of vegetation communities/land covers for foraging and potential nesting opportunities. However, direct impacts to these species will be avoided by construction phasing and through the provision of pre-construction nesting bird surveys and biological monitoring, which will help assure that special-status and/or sensitive species present within the impact areas are not jeopardized. Thus, significant direct impacts to special-status and/or sensitive wildlife are not anticipated.

Indirect Impacts

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of state and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior. Section 3503.5 of the California Fish and Game Code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes or to

take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."

Breeding birds can be significantly affected by short-term construction-related noise, which can result in the disruption of foraging, nesting, and reproductive activities. The project site supports limited breeding and abundant foraging habitat for a number of raptor species including the red-tailed hawk, Cooper's hawk, sharp-shinned hawk, and red-shouldered hawk. While the Cooper's hawk and sharp-shinned hawk are not likely to breed/nest onsite, the red-tailed hawk and the red-shouldered hawk have a moderate to high potential to nest in the eucalyptus trees within San Roque Creek. Therefore, indirect impacts to sensitive wildlife due to construction-related noise may occur due to implementation of the proposed project. This is a significant but mitigable impact. Please refer to *Section 5.0* for a list of recommended mitigation measures.

5.0 BIOLOGICAL RECOMMENDATIONS SUMMARY

The following items are recommended to ensure that the proposed project is implemented in accordance with local, state, and federal guidelines and regulations.

1. Based on the quality of vegetation communities present onsite, mitigation for permanent impacts to jurisdictional waters of the U.S., including wetlands, shall occur at the following ratios: southern willow scrub, 3:1 and disturbed wetland, 2:1. This would require roughly 0.38 acre of mitigation, which is anticipated to occur onsite within San Roque and Arroyo Burro Creek per the proposed creekside restoration and habitat enhancement plan.

2. Activities involving soil disturbance and vegetation removal associated with the proposed creek stabilization should include construction phase erosion control and polluted runoff control plans.

3. All site preparation and construction activities should incorporate standard BMPs including, but not limited to, straw bales, gravel bags, sand bags, environmental fencing, the periodic watering of bare areas, and the direction of construction area drainage to existing storm drain facilities.

4. Prior to the issuance of a grading permit, the Applicant shall obtain the following wetland permits from the resource agencies: a Section 404 permit from the ACOE; a Section 1602

Lake and Streambed Alteration Agreement from the CDFG; and a Section 401 Water Quality Certificate from the RWQCB.

5. Any work that is to occur in the bed of San Roque and Arroyo Burro Creek shall occur outside of the rainy season, where feasible and practicable, to minimize impacts to active flow.

6. The work perimeter within San Roque and Arroyo Burro Creek shall be adequately flagged prior to the start of work to ensure that impacts to sensitive vegetation communities are minimized throughout the course of construction.

7. A qualified biological monitor shall be present while crews are working within San Roque and Arroyo Burro Creek to enforce wetland permit conditions.

8. All equipment maintenance, staging areas, and dispensing of fuel, oil, or other toxicants should occur in designated upland areas outside of any adjacent waters of the U.S. or other biologically sensitive habitat.

9. If project construction occurs during the migratory bird nesting season (typically February 15 through July 1 in the Santa Barbara region), a focused avian nesting survey should be performed by a qualified wildlife biologist 72 hours prior to construction in accordance with the Migratory Bird Treaty Act (MBTA) (16 U.S.G. 703-712). If an active bird nest is found prior to construction, the nest will be flagged and mapped on the construction plans along with an appropriate buffer, which will be determined by the biologist based on the biology of the species. Construction or weed eradication work shall not occur within 200 feet of *active* raptor or other sensitive avian nests located during this survey until young have left the nest. The nest area will be avoided until the nest is vacated and the juveniles have fledged. The nest area will be demarcated in the field with flagging and stakes or construction fencing.

10. Because the monarch butterfly may utilize portions of the site for autumnal roosting, a one-time survey for this species is recommended prior to eucalyptus tree removal to ensure that temporary roost sites are not adversely impacted by the proposed project.

11. The *Final Creekside Restoration Monitoring and Maintenance Plan* shall include more detailed information on the intended planting and seeding. The report shall also include an additional planting legend table to indicate the species to be provided from container

plants, the assumed percentage composition of each species, the spacing and assumed sizes from container plants. This will be needed to allow for the translation of the assumed planting scheme into the final revegetation construction documents (i.e. plans and specifications).

12. The *Final Creekside Restoration Monitoring and Maintenance Plan* shall include further discussion regarding proposed irrigation requirements. Additional discussion regarding the use of overhead spray irrigation systems for some portions of the restoration effort to supplement the discussion regarding drip systems is needed.

13. The *Final Creekside Restoration Monitoring and Maintenance Plan* shall include additional information in *Section 6.3* (Performance Criteria) and *Table 2* (Performance Criteria Matrix), to provide guidelines for percent native verses non-native cover throughout the five-year monitoring period. These guidelines shall provide specific cover goals to be achieved by the end of each year and to which the collected transect data would be evaluated.

14. The planting of non-native species including, but not limited to, castor bean, English ivy, Algerian ivy (*Hedera canariensis)*, periwinkle, hottentot fig (*Carpobrotus edulis*), little leaf cotoneaster (*Cotoneaster mycrophyllus*), licorice plant (*Helichrysum petiolare*); giant cane, pampas grass (*Cortaderia selloana*); French broom (*Genista monspessulana*); scotch broom (*Cytisus scoparius*) and Spanish broom (*Spartium junceum*), is prohibited. A list of other invasive species can be found at the California Exotic Pest Plant Council web site (www.caleppc.org).

15. All plant palettes should be reviewed by a qualified biologist and/or habitat restoration specialist familiar with those plants native or endemic to this region of California.

16. Prior to tree removal, a qualified habitat restoration specialist shall clearly mark those trees targeted for removal to ensure that native trees including willows (*Salix* ssp.) and coast live oak are salvaged.

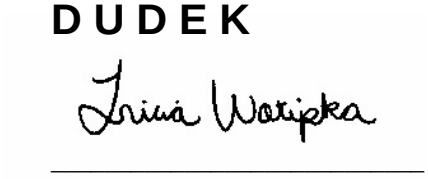
17. Avoid and/or minimize the use of lighting along the backside of buildings facing San Roque or Arroyo Burro Creek. In proposed parking facilities, lighting fixtures should comply with City standards for shielded low sodium, low wattage lighting designed to cut glare and light scatter and to direct light away from sensitive biological resources.

18. Install silt fencing and other silt containment devices where necessary to prevent offsite transport of sediment and pollutants. Install oil and grease traps at storm drain inlets. Storm drains should be covered with silt fencing until landscaping or other suitable groundcover is in place.

If you have any questions or comments regarding the content of this letter please do not hesitate to contact me via telephone at (805) 963-0651 ext. 3553 or via e-mail at twotipka@dudek.com.

Very truly yours,

DUDEK



Tricia Wotipka
Project Manager/Biologist

cc: April Verbanac, Dudek
att: Figures 1 through 5

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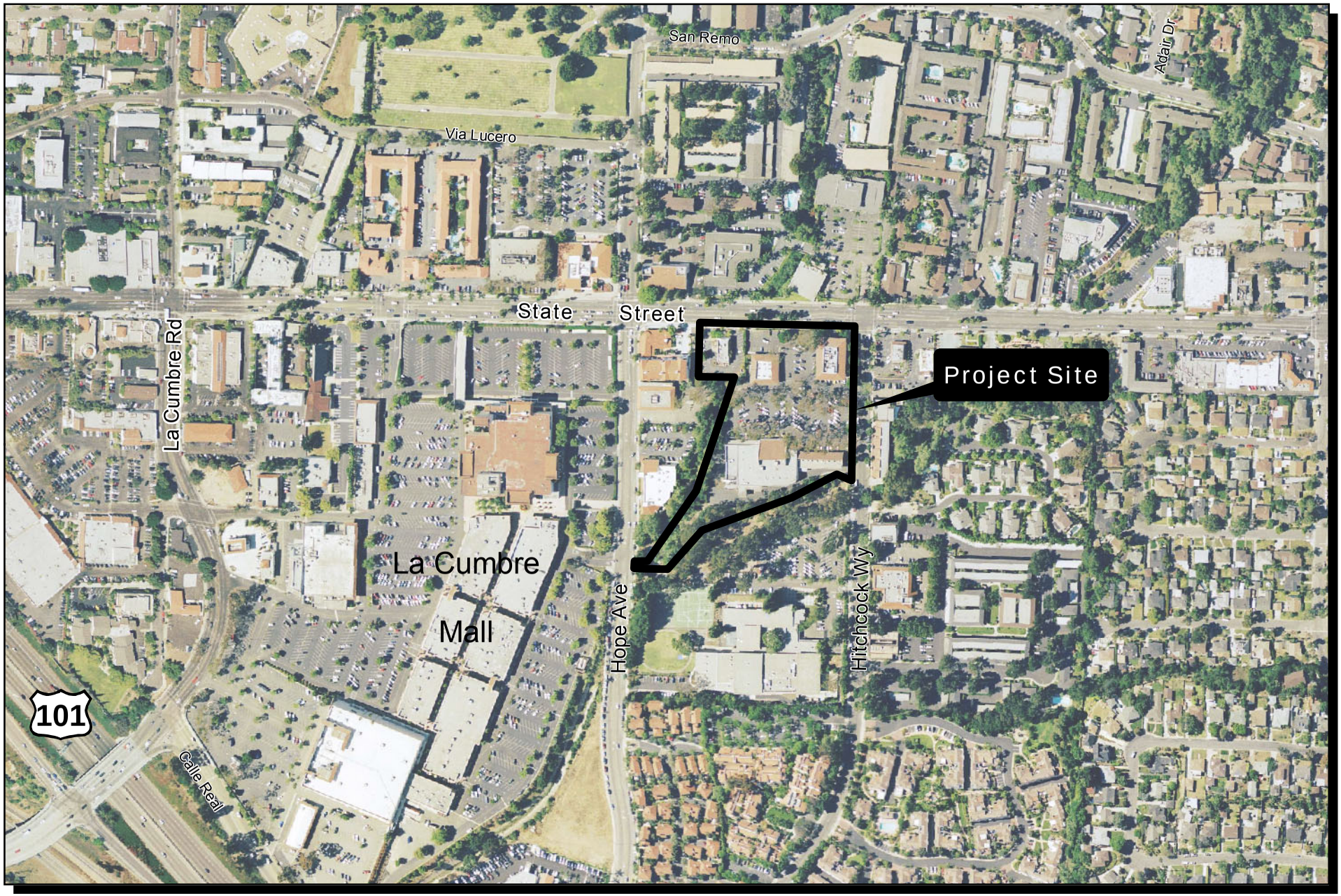
Whole Foods Market Project - Biological Resources Letter Report

FIGURE 1

Regional Setting



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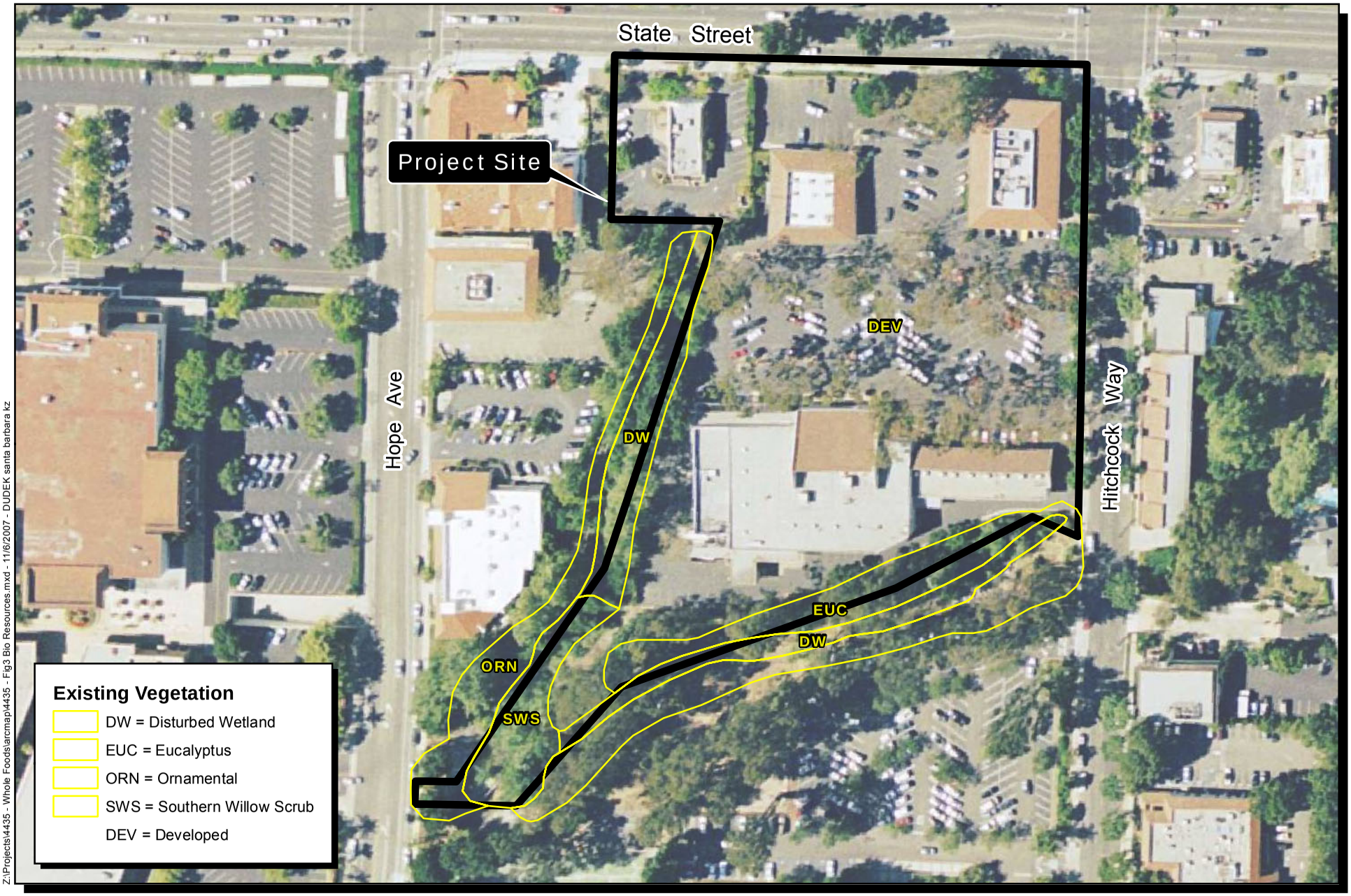
DUDEK

0 500 Feet

Whole Foods Market Project - Biological Resources Letter Report

Project Vicinity

FIGURE 2



Z:\Projects\4435 - Whole Foods\arcmap\4435 - Fig3 Bio Resources.mxd - 11/6/2007 - DUDEK santa barbara kz

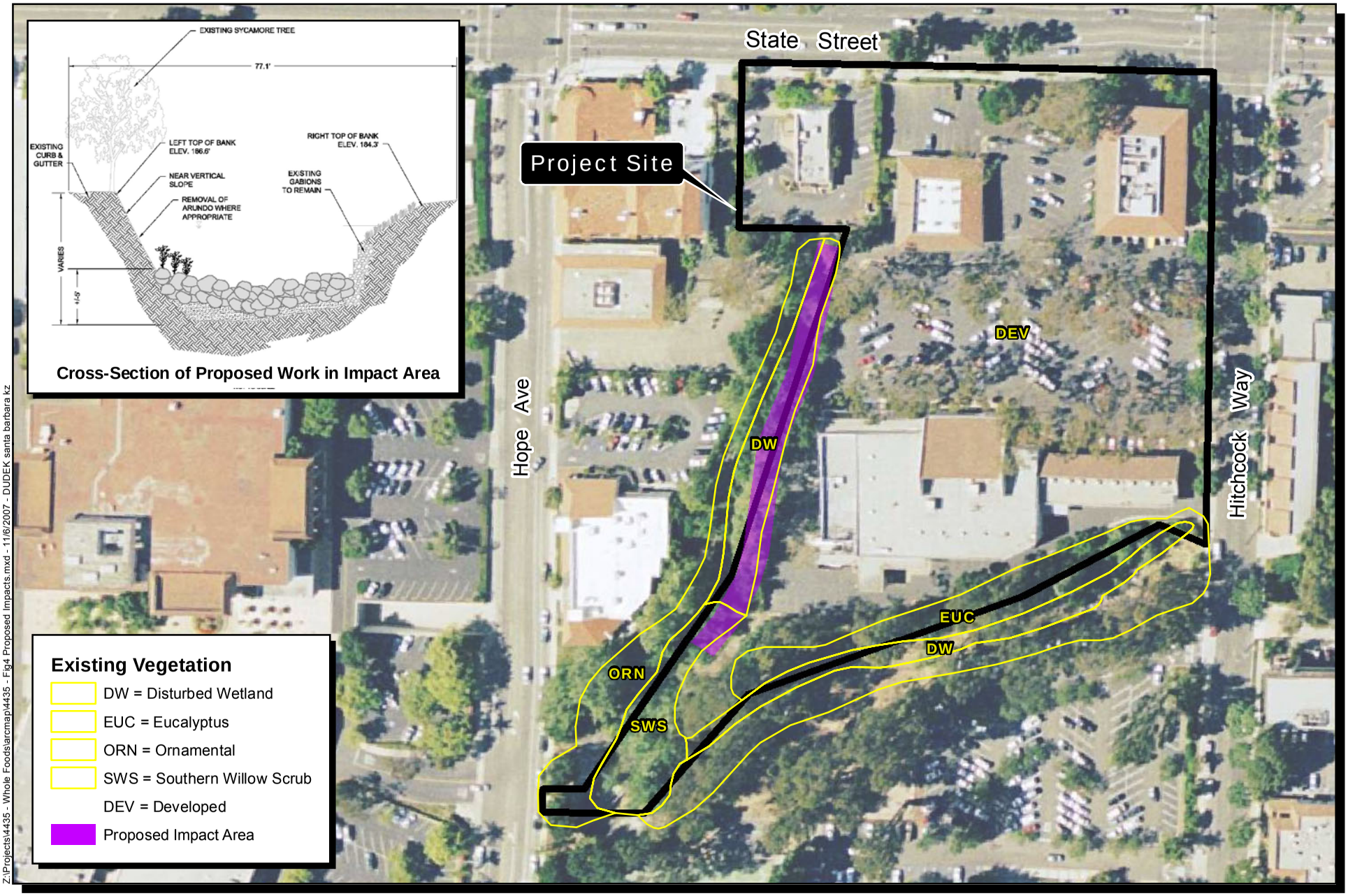
DUDEK

0 200 Feet

Whole Foods Market Project - Biological Resources Letter Report

Biological Resources

FIGURE 3



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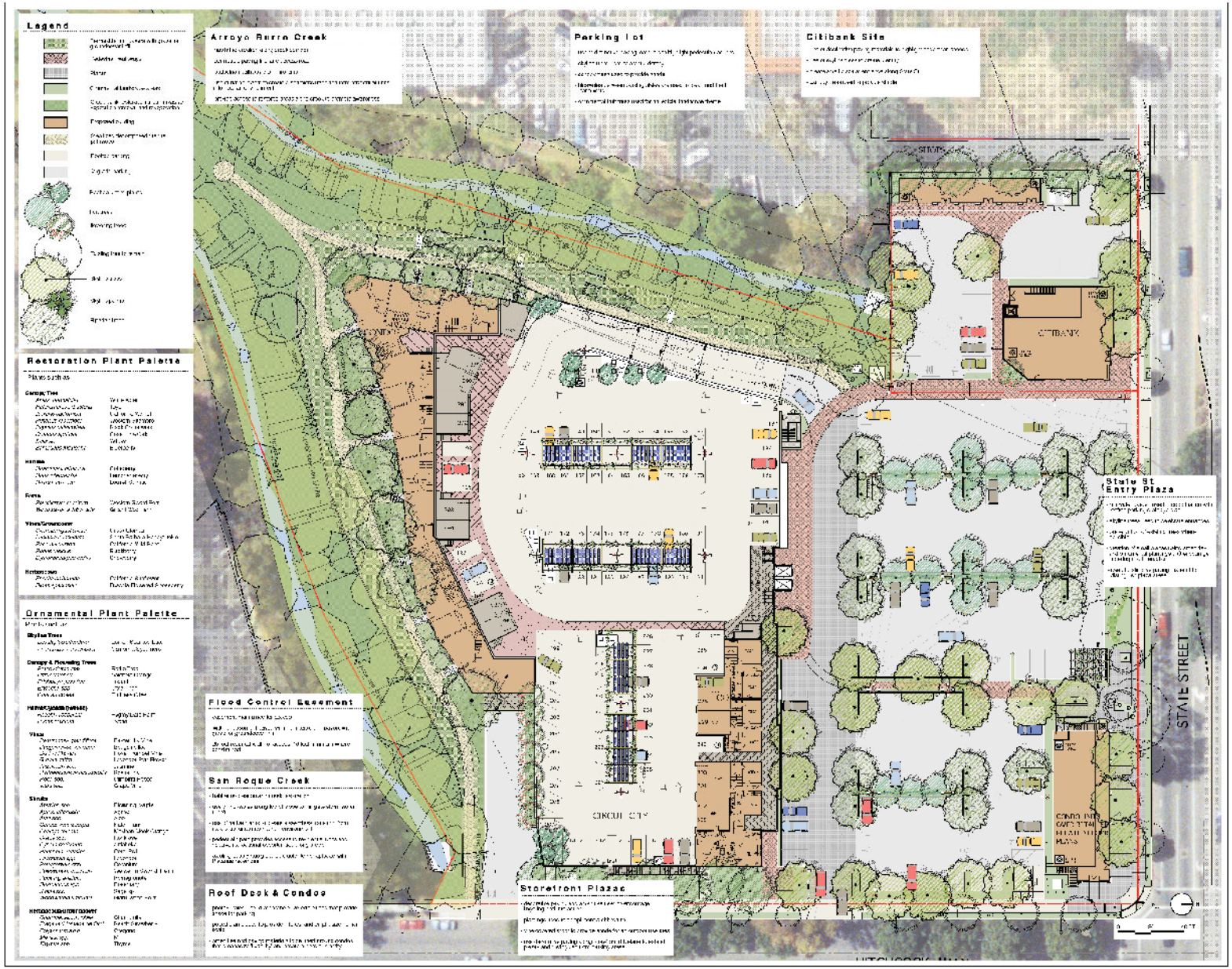
Proposed Impacts

FIGURE 4



Z:\Projects\4435 - Whole Foods\arcmap\4435 - Fig5 Proposed Site Restoration.mxd - 11/6/2007 - DUDEK santa barbara kz

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Proposed Site Restoration

FIGURE 5

APPENDIX A

Cumulative List of Plant Species

APPENDIX A
LIST OF PLANT SPECIES OBSERVED ONSITE

VASCULAR PLANT SPECIES

SPHENOPSIDS

EQUISETACEAE – HORSETAIL FAMILY

Equisetum arvense – horsetail

ANGIOSPERMAE (DICOTYLEDONES)

AIZOACEAE - FIG-MARIGOLD FAMILY

* *Carpobrotus edulis* – hottentot fig

ANACARDIACEAE - SUMAC FAMILY

* *Schinus terebinthifolius* - Brazilian pepper tree

Toxicodendron diversilobum - western poison oak

APIACEAE - CARROT FAMILY

* *Foeniculum vulgare* - fennel

APOCYNACEAE - DOGBANE FAMILY

* *Nerium oleander* - oleander

* *Vinca major* - greater periwinkle

ARALIACEAE - GINSENG FAMILY

* *Hedera helix* - English ivy

ASTERACEAE - SUNFLOWER FAMILY

Artemisia douglasiana - mugwort

Baccharis pilularis - chaparral broom, coyote brush

* *Picris echioides* - bristly ox-tongue

* *Senecio mikanioides* - German-ivy

Xanthium strumarium - cocklebur

BETULACEAE - BIRCH FAMILY

Alnus rhombifolia - white alder

CAPRIFOLIACEAE - HONEYSUCKLE FAMILY

Lonicera hispidula - California honeysuckle

APPENDIX A
LIST OF PLANT SPECIES OBSERVED ONSITE

EUPHORBIACEAE - SPURGE FAMILY

* *Ricinus communis* - castor bean

FAGACEAE - OAK FAMILY

Quercus agrifolia var. *agrifolia* - coast live oak

JUGLANDACEAE - WALNUT FAMILY

Juglans sp. - walnut

MALVACEAE - MALLOW FAMILY

Malva nicaeensis – bull mallow

MYOPORACEAE - MYOPORUM FAMILY

* *Myoporum laetum* - ngaio, myoporum

MYRTACEAE - MYRTLE FAMILY

* *Callistemon rigidus* - bottlebrush
* *Eucalyptus* sp. - eucalyptus
* *Eucalyptus camaldulensis* - red gum, river red gum
* *Eucalyptus globulus* - blue gum

OLEACEAE - OLIVE FAMILY

* *Fraxinus uhdei* – smashel ash

PITTOSPORACEAE – PITTOSPORUM FAMILY

* *Pittosporim tobira* - pittosporum

PLATANACEAE - SYCAMORE FAMILY

Platanus racemosa - western sycamore

ROSACEAE - ROSE FAMILY

Heteromeles arbutifolia- toyon
Rubus ursinus - California blackberry

SALICACEAE - WILLOW FAMILY

Populus fremontii- Fremont's cottonwood
Salix gooddingii - Goodding's black willow
Salix lasiolepis - arroyo willow

APPENDIX A
LIST OF PLANT SPECIES OBSERVED ONSITE

SOLANACEAE - NIGHTSHADE FAMILY

* *Nicotiana glauca* - tree tobacco

Solanum douglasii - Douglas' nightshade

TROPAEOLACEAE - NASTURTIUM FAMILY

* *Tropaeolum majus* - garden nasturtium

URTICACEAE- NETTLE FAMILY

Urtica dioica - stinging nettle

ANGIOSPERMAE (MONOCOTYLEDONES)

ARECACEAE - PALM FAMILY

* *Phoenix canariensis* - Canary Island date palm

Washingtonia filifera - California fan palm

CYPERACEAE - SEDGE FAMILY

Cyperus eragrostis - tall flatsedge

POACEAE - GRASS FAMILY

* *Agrostis viridis* - water bent

* *Arundo donax* - giant reed

* *Bromus diandrus* - ripgut grass

Melica imperfecta - coast range melic

TYPHACEAE - CATTAIL FAMILY

Typha angustifolia - narrow-leaved cattail

* signifies introduced (non-native) species

APPENDIX B

Cumulative List of Wildlife Species

APPENDIX B
LIST OF WILDLIFE SPECIES OBSERVED ONSITE

WILDLIFE SPECIES - VERTEBRATES

REPTILES

IGUANIDAE - IGUANID LIZARDS

Sceloporus occidentalis - western fence lizard

BIRDS

TROCHILIDAE - HUMMINGBIRDS

Calypte anna - Anna's hummingbird

PICIDAE - WOODPECKERS

Melanerpes formicivorus - acorn woodpecker

TYRANNIDAE - TYRANT FLYCATCHERS

Sayornis nigricans - black phoebe

CORVIDAE - JAYS & CROWS

Corvus brachyrhynchos - American crow

TROGLODYTIDAE - WRENS

Thryomanes bewickii - Bewick's wren

MIMIDAE – THRASHERS

Mimus polyglottos - northern mockingbird

EMBERIZIDAE - BUNTINGS & SPARROWS

Melospiza melodia - song sparrow

FRINGILLIDAE - FINCHES

Carpodacus mexicanus - house finch

APPENDIX B
LIST OF WILDLIFE SPECIES OBSERVED ONSITE

WILDLIFE SPECIES - INVERTEBRATES

BUTTERFLIES AND MOTHS

PIERIDAE - WHITES AND SULFURS

Pieris rapae rapae - cabbage butterfly

NYMPHALIDAE - BRUSH-FOOTED BUTTERFLIES

Danaus plexippus – monarch
Vanessa atalanta – red admiral